Actions Covid-19
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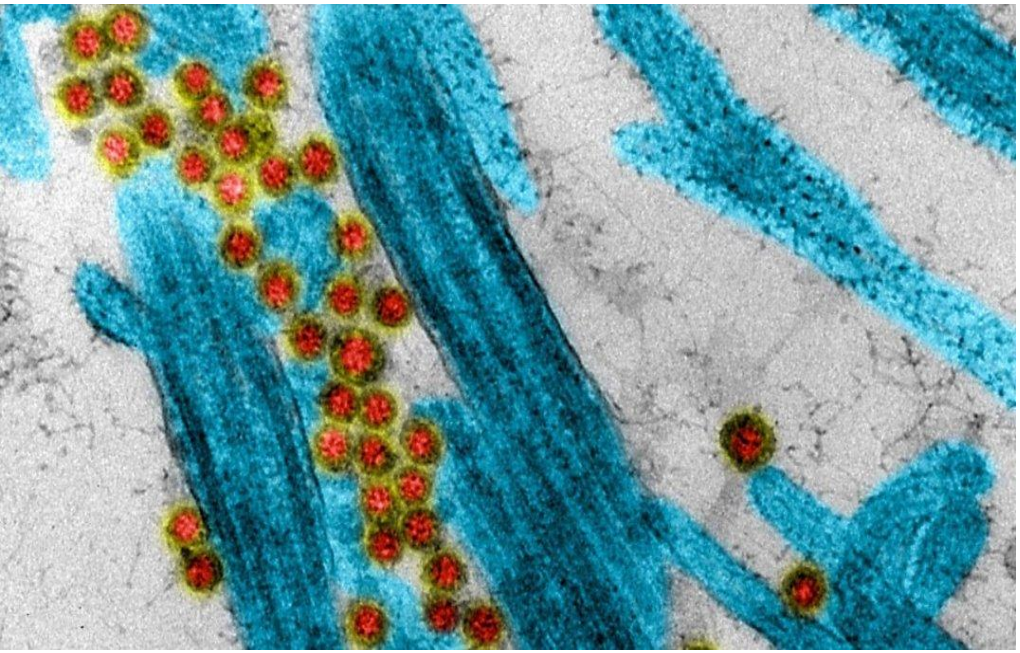
Actions ANR Covid-19

- **Call « Flash Covid-19 » - March 2020** : Immediate answer to epidemics
- **Open Call « Research Action-Covid-19 » – April-October 2020** : Take into account diversity of questions appearing during the developement of Covid-19 pandemics
- **Priority on Covid-19 in the ANR general national call 2021 (deadline end november 2020)** : Promotion of mid- and long-term projects to fight Covid-19 and to learn lessons from the Covid-19 pandemics
- **Promotion of international collaborations on Covid-19** : interactions funding agencies partners of ANR

FLASH Covid-19 –March 2020

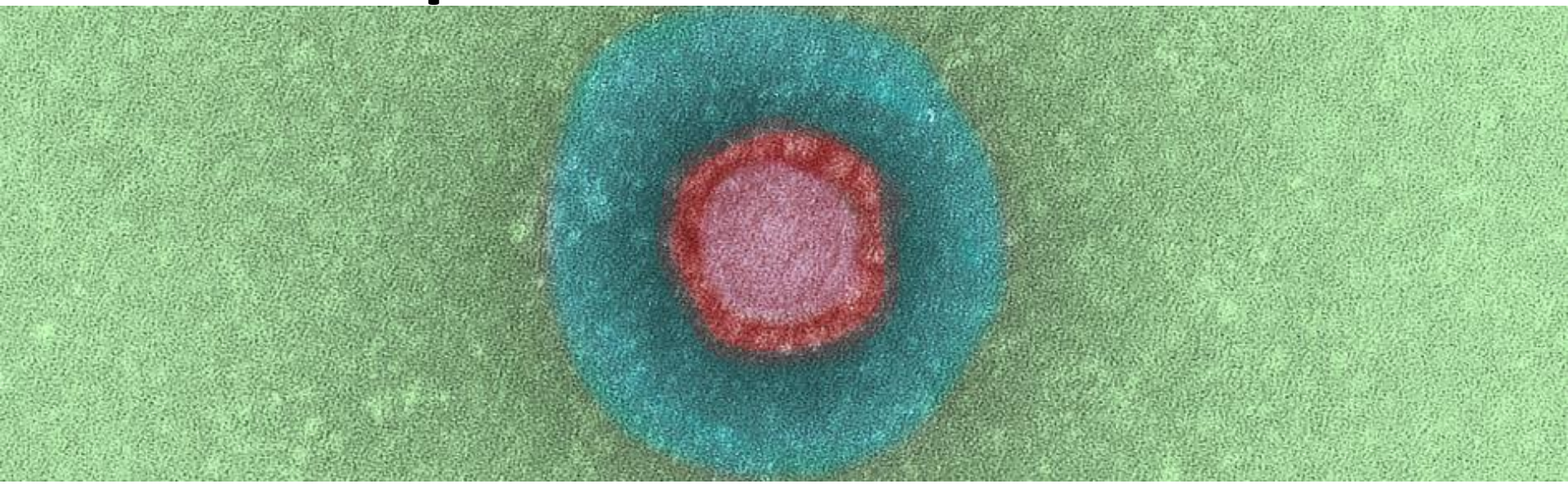
4 aims (based on WHO recommendations) :

- ***Epidemiological studies***
- ***Pathophysiology of the disease***
- ***Infection prevention and control***
- ***Ethics and social dynamics***



- **Budget : 18,4 M€**
- **107 funded projects out of 258 projects**
- **Projects : <24 months and <200k€**

Open-Call RA- Covid-19

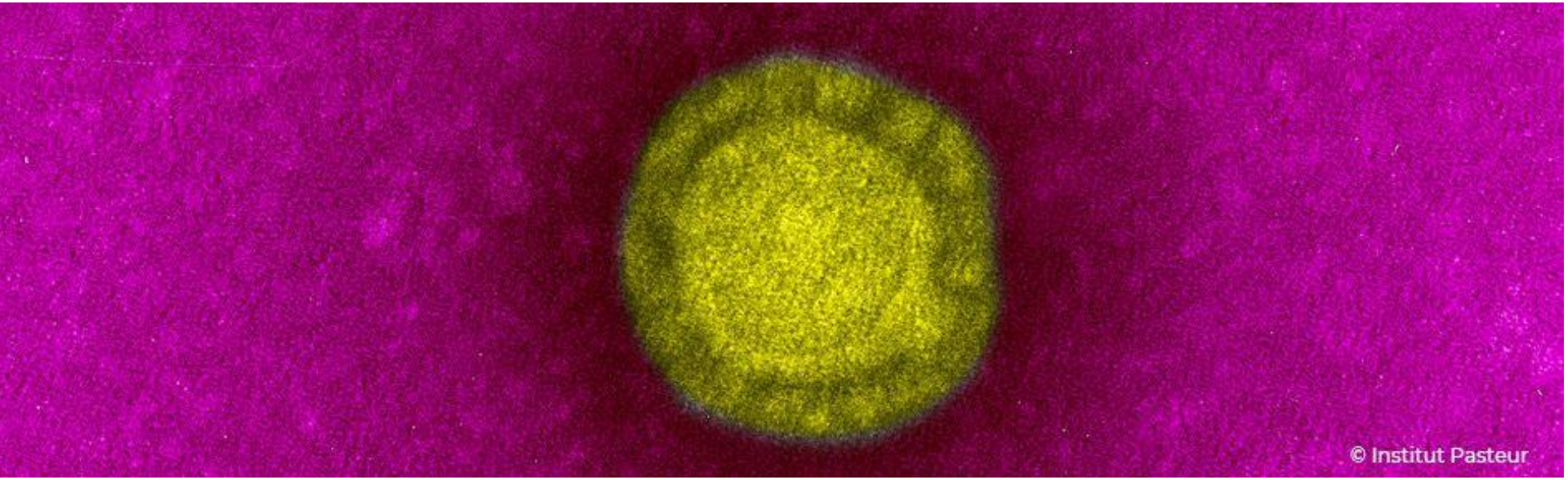


- Open call from 20th april 2020 till 28th october 2020
- Projects : Budget <150 k€ , duration 3 to 12 months
- « Research-Action » projects :
    - Provide deliverables immediately at the end of the project
    - Establish data collection during epidemics crisis
- Expectations : 60-80 funded projects out of 400 projects
- 4 aims of Flash Covid-19 plus :
    - ***Global challenges of the Covid-19 epidemic***

Covid-19 and 2021 ANR programmation

- Which initiative for mid- and long term Covid-19 projects at ANR ?

- **Priority Covid-19 displayed on ANR national general Call 2021**



International collaborations Covid-19

- **ANR : promotion of collaboration with foreign funders agencies**

  No joint calls but connections between funded teams

  Examples :

  - 3 foreign partners in Flash Covid-19 projects : Canada, Italy, USA
  - Call J-Rapid of JST (Japan) : 3 franco-japanese projects.
  - Workshop NSFC China - Science Europe (in preparation)

- **ANRS : International FLASH Call – April 2020**

  « Covid-19 in ressource-limited countries »

Water & Covid-19

- **3 projects submitted on « Water & Covid-19 » in FLASH and RA-Covid-19 calls**

  - **WaterCov** : Spatiotemporal Mapping of the Spread of COVID-19 through Waste Water (not funded)
  - **DISCO** : Dissemination and Stability of SARS-CoV-2 in the coastal environment (funded)
  - **EPI-COV** : Environmental ePIdemiology of COVID-19 in French Guiana: combining eDNA and biogeography to forecast future epidemiological waves

DISCO

- SARS-CoV-2 has been detected in raw wastewaters in several countries and the assessment of contamination through wastewater discharge in the coastal environment is required.
- This project aims to the assessment and optimization of detection methods for SARS-CoV-2 in coastal waters and shellfish, to apply these methods to samples collected along the French coast since April 2020. Importantly, the stability of a surrogate CoV in seawater at different temperatures and salinities representative of French coastal seawaters will be evaluated as well as in artificially contaminated oysters.

EPI-COV

Environmental ePIdemiology of COVID-19 in French Guiana: combining eDNA and biogeography to forecast future epidemiological waves

- The unprecedented speed of COVID-19 pandemic highlights the urgent need in improving our understanding of the virus's epidemiological dynamics and the necessity to integrate the natural environment in disease epidemiology.
- As such, EPI-COV, using a OneHealth/EcoHealth approach, aims at :

  1) performing an environmental monitoring of SARS-CoV-2 in urban and peri-urban wastewater in French Guiana, South America,

  2) identify the virus's presence and diversity in the surrounding environment of susceptible-infected-recovered people

  3) identify environmental and socio-economic factors potentially involved in COVID-19 emergence.

The objective is to develop easy, rapid and non-invasive epidemiological indicators of the circulation of the virus in human population, to identify areas at risk of COVID-19 emergence and to propose models to forecast future epidemiological waves at a local and global scales.

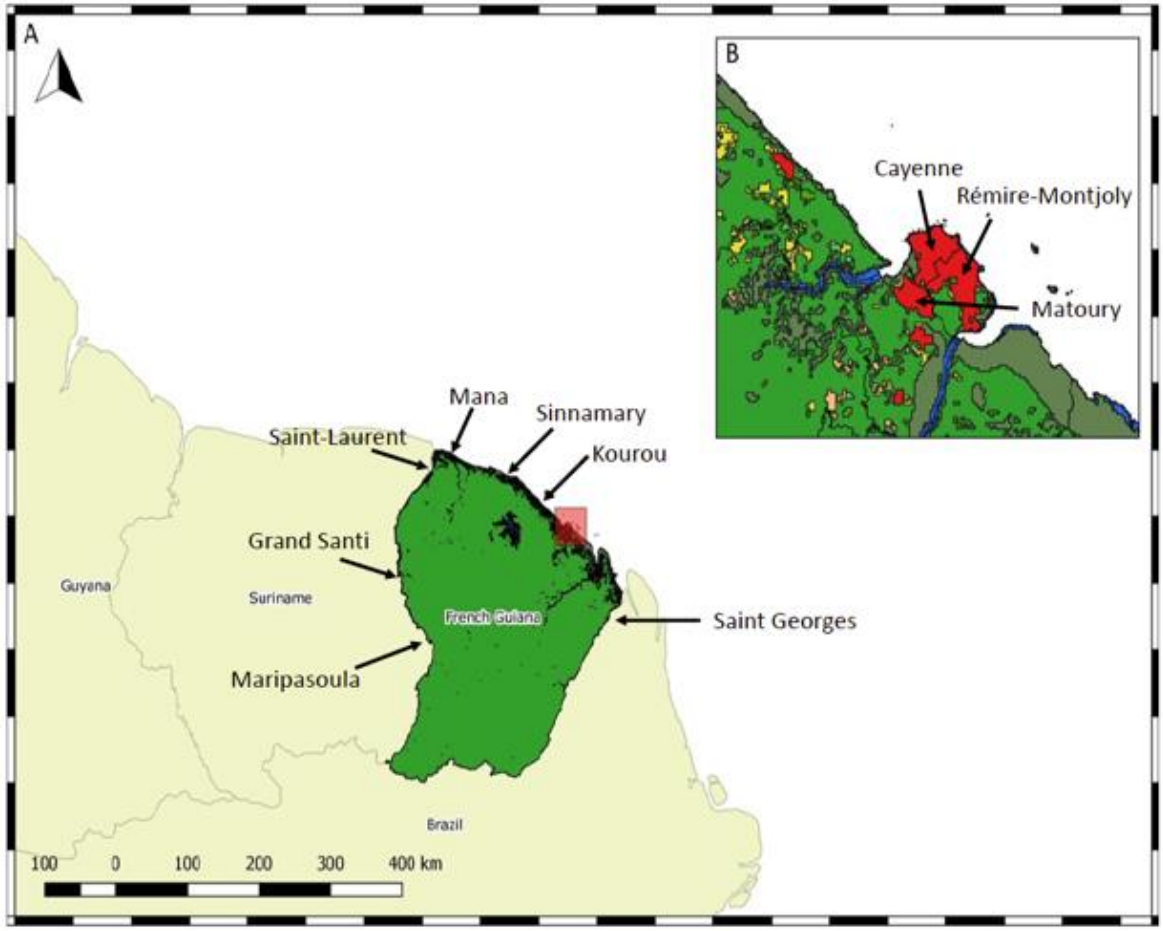


Figure 1. A. Map of French Guiana showing the diverse land cover: primary forests in green, mangroves in olive, water in blue, urban area in red, shrubland in orange and cropland in yellow. Inset B. Land cover map illustrating the proximity of primary forests to the urban regions of Cayenne, capital of French Guiana.